

GE Medical Systems

General Electric Company P O Box 414 Milwaukee, WI 53201

510(k) SUMMARY OF SAFETY AND EFFECTIVENESS

This 510(k) summary of safety and effectiveness information is submitted in accordance with the requirements of 21 CFR Part 807.87(h).

Submitter

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Date Prepared: November 30th, 2000

PRODUCT IDENTIFICATION

Name:

Advantage Windows CT/PET Fusion

Classification Name: Accessory to Computed Tomography System

Manufacturer:

General Electric Medical Systems

283, rue de la Miniere

78533 Buc Cedex, FRANCE

Distributor:

General Electric Medical Systems, Milwaukee, WI

Marketed Devices

The CT/PET Fusion is substantially equivalent to the device listed below:

Model:

Advantage Windows Fusion (CT/MR Fusion)

Manufacturer:

General Electric Medical Systems, Milwaukee, WI

510(k) #:

K983256

Device Description:

The GEMS Advantage Windows CT/PET Fusion software package is an option on Advantage Windows that provides easy comparison of three dimensional (3D) images from Computed Tomography (CT) and Position Emission Tomography (PET) or GEMS Hawkeye Single Photon Emission Tomography (SPECT). It allows 3D registration between two volumetric acquisitions, which may come from different acquisition modalities, producing fusion of anatomical and functional images.

Indications for Use:

Advantage Windows CT/PET Fusion provides an easy means for comparison of three dimensional (3D) images from Computed Tomography (CT: providing anatomical imaging) and Emission Tomography (PET or SPECT: providing functional imaging). It allows registration between two volumetric acquisitions, which may come from different acquisition modalities (CT and PET/SPECT), for use in diagnostic radiology or therapy planning.

Comparison with Predicate:

The Advantage Windows CT/PET Fusion option allows merged 3D registration of anatomical images from CT with functional images from PET/SPECT. The functional features of this package are substantially equivalent to that of the following device:

Device Name	FDA Clearance Number
Advantage Windows Fusion	K983256

Adverse Effects on Health:

The potential hazards are identified in a risk management summary (hazard analysis) and are controlled by:

- Software Development, Validation and Verification Process to ensure performance to specifications, Federal Regulations and user requirements.
- Adherence to industry and international standards.

Conclusions:

The Advantage Windows CT/PET Fusion does not result in any new potential safety risks and performs as well as devices currently on the market. GE considers features of the Advantage Windows CT/PET Fusion to be equivalent to those of Advantage Windows (CT/MR) Fusion (K983256).



FEB 1 6 2001

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

GE Medical Systems, Inc. C/O Reiner Krumme TUV Rheinland of North America, Inc. 12 Commerce Road NEWTON CT 06470 Re: K010336

Advantage Windows CT/PET Fusion

Dated: February 2, 2001 Received: February 5, 2001 Regulatory Class: II

21 CFR §892.2050/Procode: 90 LLZ

Dear Mr. Krumme:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the encrosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4639. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsma/dsmamain.html".

Daniel G. Schultz, M.D.

Captain, USPHS

Sincerely yours

Acting Director, Division of Reproductive, Abdominal, and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

STATEMENT OF INTENDED USE

510(k) Number (if known): <u>K010336</u>
Device name: Advantage Windows CT/PET Fusion
Indication For Use:
Advantage Windows CT/PET Fusion provides an easy means for comparison of three dimensional (3D) images from Computed Tomography (CT: providing anatomical imaging) and Emission Tomography (PET or SPECT: providing functional imaging). It allows registration between two volumetric acquisitions, which may come from different acquisition modalities (CT and PET/SPECT), for use in diagnostic radiology or therapy planning.
(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)
Concurrence of CDRH, Office of Device Evaluation (ODE)
Concurrence of CDICII, Office of Device Diagrams (022)
Prescription UseOR- Over-The-Counter Use (Per 21 CFR 801.109)
(Division Sign-Off) Division of Reproductive, Abdominal, ENT,
and Radiological Devices 510(k) Number 10330